

TIME	MONDAY 20 MAY 2013
20:00	Welcome Reception + Registration "Haus am Westbahnhof"

TIME	TUESDAY 21 MAY 2013	
07:45	Registration opens	
08:30	WELCOME - Room: Audimax	
SESSION 1-1: THE ROLE OF PLANTS IN BIOHYDROLOGICAL INTERACTIONS		
Chair: Andreas Lorke - Room: Audimax		
08:45	Keynote Nadezhda Nadezhkina; Ferreira, M. I.; David, T.	<i>Role of trees for homogenizing soil moisture in the rhizosphere</i>
09:15	<u>Dara, A.</u> ; Moradi, A.B.; Oswald, S.	<i>Pattern of root water uptake in patchy soil water distribution using neutron radiography</i>
09:35	Nomiyama, R.; Yasutake, D.; Mori, M.; <u>Kitano, M.</u>	<i>Transpiration integrated model for root ion absorption under the salinized condition</i>
09:55	<u>Rudolph-Mohr, N.</u> ; Greiner, T.; Vontobel, P.; Oswald, S.	<i>Imaging the vital parameters of plants – Interrelated pattern of respiration, exudation and root water uptake</i>
10:15	Coffee break	
SESSION 1-1: THE ROLE OF PLANTS IN BIOHYDROLOGICAL INTERACTIONS - CONTINUED		
Chair: Lubomir Lichner - Room: Audimax		
10:45	Keynote Doris Vetterlein	<i>Root water uptake - New insight</i>
11:15	Zarebanadkouki, M.; <u>Carminati, A.</u>	<i>Variable effects of mucilage on root water uptake</i>
11:35	<u>Koebnick, N.</u> ; Huber, K.; Javaux, M.; Vanderborght, J.; Vetterlein, D.; Vogel, H.-J.; Jahn R.	<i>Effect of root ageing in water uptake – Modeling scenarios based on root age mapping with X-ray CT</i>
11:55	<u>Huber, K.</u> ; Vanderborght, J.; Javaux, M.; Vereecken, H.	<i>Simulating the impact of plant growth on root water uptake</i>
12:15	Lunch	
SESSION 1-1: THE ROLE OF PLANTS IN BIOHYDROLOGICAL INTERACTIONS - CONTINUED		
Chair: Doris Vetterlein - Room: Audimax		
14:15	<u>He, L.</u> ; Ivanov, V.; Schneider, C.; Kalbacher, T.; Shao, H.; Hildebrandt, A.	<i>Regional implications of species-specific microscopic root water uptake strategies at a temperate mixed forest in the changing climate</i>
14:35	<u>Zarebanadkouki, M.</u> ; Kim, Y.; Carminati, A.	<i>Where do roots take up water? A new technique to measure local flow of water into roots</i>
15:00	Keynote Christian Körner; Hiltbrunner, E.; Inauen, N.; Van den Bergh, T.	<i>Hydrological consequences of land use change in mountain watersheds</i>
15:30	Coffee break	
SESSION 4-1: BIOFILMS AND HYDROLOGY		
Chair: Jörg Bachmann - Room: Audimax		
16:00 solicited	<u>Weitere, M.</u> ; Norf, H.; Wey, J. K.; Neu, T.R.	<i>The functional role of biofilms in aquatic ecosystems</i>
16:20	<u>Mutz, M.</u> ; Mendoza-Lera, C.; Federlein, L.	<i>Microbial control of interface structure and water exchange across the bed of lowland streams</i>
16:45 – 19:00	Posters & Wine Chair: Christian Körner - Room: Atrium	

TIME	WEDNESDAY 22 MAY 2013	
SESSION 3.2: WATER-TO-LAND EFFECTS		
Chair: Ralf B. Schäfer - Room: Audimax		
08:30	Keynote John S. Richardson	<i>Resource exchanges across freshwater-terrestrial boundaries and feedback processes between adjacent ecosystems</i>
09:00	<u>Gergs, R.</u> ; Koester, M.; Schulz, R.S., Schulz; R.	<i>Cross-system trophic effects: Does the invasive aquatic Dikerogammarus villosus affect terrestrial food webs?</i>
09:20	<u>Benning, R.</u> ; Feger, K.-H.	<i>Dissolved organic carbon exports during high flow events in small homogenous catchments in eastern Germany</i>
09:40	<u>Meriste, M.</u> ; Ivask, M.; Kuu, A.	<i>Frequently flooded coasts are most spider rich habitats in small islets of Väinameri (Baltic sea, Estonia)</i>
10:00	Coffee break	
SESSION 3.3: LAND-WATER-SYSTEMS		
Chair: Viliam Novak - Room: Audimax		
10:30 solicited	<u>Ehret, U.</u> ; Zehe, E.; Kleidon, A.; Scherer, U.	<i>Maximum power as an optimality principle for dynamics of (bio-)hydrological systems?</i>
10:50	<u>Schonsky, H.</u> ; Peters, A.; Wessolek, G.	<i>Energy and water fluxes at the soil atmosphere interface of water repellent soils</i>
11:10	<u>Edmaier, K.M.</u> ; Crouzy, B.; Ennos, R.; Burlando, P.; Perona, P.	<i>Resistance to uprooting of Avena sativa and Medicago sativa and related significance for juvenile riverbed vegetation</i>
11:30	Keynote Eckart Priesack	<i>Modelling single tree transpiration based on 3D plant architecture</i>
12:00	Lunch	
14:00	Excursions	

TIME	THURSDAY 23 MAY 2013		
SESSION 1.2: BIOTA AS HYDRAULIC ENGINEERS			
Chair: Kai Uwe Totsche - Room: Audimax			
08:30	Keynote Dani Or	<i>Biophysical processes shaping bacterial life in soils – An unexplored universe under our feet</i>	
09:00 solicited	<u>Hallett, P.</u> ; Hama Karim, K.; Deng, W.; Bengough, G.; Daniell, T.; Iannetta, P.P.M.; Paterson, E.; Jeng, D.-S.; Loades, K.; Lumsdon, D.O.; Squire, G.R.	<i>Bioengineering soil sustainability: Hydrological, mechanical and structural properties of soil altered by microbes, seeds and roots</i>	
09:20	<u>Rosenbom, A.E.</u> ; Binning, P.J.; Aamand, J.; Dechesne, A.; Smets, B.; Johnsen, A.R.	<i>Impact of wormholes and cm-scale distributions of biodegradation potential on simulated pesticide leaching through loamy agricultural soil</i>	
09:40	<u>Blaser, S.</u> ; Vetterlein, D.; Jahn, R.; Kaiser, K.; Vogel, H.-J.	<i>Is the soil profile mirrored in biopore profiles?</i>	
10:00	<u>Helliwell, J.</u> ; Sturrock, C.; Miller, T.; Whalley, R.; Mooney, S.	<i>Bioengineering of soil systems: Microbial impact on soil structure and function</i>	
10:20	Coffee break		
SESSION 4.2: SOIL BIOGEOCHEMICAL INTERFACES CONTROL HYDROLOGICAL PROCESSES			
Chair: Dani Or - Room: Audimax			
10:50 solicited	<u>Totsche, K.U.</u>	<i>BGI in natural porous media and their role for fluid flow and transport</i>	
11:10	<u>Holthusen, D.</u> ; Haas, C.; Peth, S.; Horn, R.	<i>Why we need to consider rheological properties of fluids in biohydrology</i>	
11:30	Bond, A.E.; Dudley, E.; Matthews, G. P.; Doerr, S.; <u>Van Keulen, G.</u>	<i>A cross-disciplinary soil-proteomics and modelling approach for predicting switches between hydrophilic and hydrophobic soil surface responses</i>	
11:50	<u>Burkhardt, J.</u> ; Pariyar, S.; Hunsche, M.	<i>From leaf wetness to deliquescent leaf surface particles – microscopic water at the plant/atmosphere interface</i>	
12:10	Lunch		
	SESSION 1.4: BIOHYDROLOGICAL PROCESSES AT VARIOUS SCALES Chair: Gabriele E. Schaumann Room: Audimax	SESSION 2.3: LAND USE AND CLIMATE CHANGE Chair: Sylvie Drahorad Room: CIV 060	SESSION 3.4: LAND-WATER-INTERACTIONS Chair: John S. Richardson Room: Bill
14:00	<u>Van Schaik, L.</u> ; Schneider, A.-K.; Zangerlé, A.; Eccard, J.; Schröder, B. <i>Influence of rodent burrows, as part of macropore networks, on infiltration patterns</i>	<u>Krisnayanti, B.D.</u> ; Anderson, C.W.N. <i>Hydrology as a point-source pollution of mercury-cyanide into rice paddies</i>	<u>Mokhtari, D.</u> <i>Study of hydrodynamic behavior of different non anthropic soils by rainfall simulation in the plain of Lower Cheliff</i>

	Room: Audimax	Room: CIV 060	Room: Bill
14:15	<u>Kondratyeva, L.</u> <i>Ecological effect of pollution of river ice</i>	Sevostianova, E.; <u>Leinauer, B.</u> ; Serena, M.; Alvarez, G. <i>Experimental soil surfactants improve turf quality and reduce irrigation requirement</i>	<u>Kändler, M.</u> ; Seidler, C. <i>Drift of macrozoobenthos depending on hydrological processes in the Landwasser river (Saxony, Germany)</i>
14:30	<u>Szejba, D.</u> ; Szatyłowicz, J. <i>SWAP model application for water balance elements prediction of drained clay soil</i>	<u>Lutzenberger, A.K.</u> <i>"Globalands" - Analysis of global land use change</i>	<u>Schittny, D.C.</u> <i>Primary succession of pioneer vegetation on newly formed fresh-water islands in Lake Wohlen (Switzerland)</i>
14:45	<u>Jurik, L.</u> ; <u>Tatosova, L.</u> ; <u>Huska, D.</u> <i>Environmental effects of landscape changes at water quality of the Slovak rivers Zitava and Slana and its tributaries</i>	<u>Dernedde, Y.</u> ; <u>Kraft, P.</u> ; <u>Breuer, L.</u> ; <u>Stulina, G.</u> ; <u>Frede, H. G.</u> <i>Identification and quantification of sources of plant water supply for irrigated cotton sites in Fergana Valley, Uzbekistan</i>	<u>Krell, B.</u> ; Röder, N.; Link, M.; Gergs, R.; Entling, M.; Schäfer, R.B. <i>Aquatic prey subsidies to riparian spiders in different land-use-systems</i>
15:00	<u>Yasutake, D.</u> ; Kiyokawa, C.; Kondo, K.; Nomiya, R.; Kitano, M.; Mori, M.; Yamane, S.; Maeda, M.; Nagare, H.; Fujiwara, T. <i>Characteristics of salt absorption by roots of corn catch crop at different densities in a greenhouse</i>	<u>Hassan, Z.M.</u> <i>Qanats irrigation in Iraq, back to originality</i>	
15:15	<u>Nomiya, R.</u> ; <u>Yasutake, D.</u> ; Mori, M.; Tagawa, K.; Cho, H.; Marui, A.; Wang, W.; Kitano, M. <i>Simulation of soil salinization affected by absorptive function of crop roots</i>	<u>Nkue Nouwezem, D.J.</u> <i>The Cameroun west vis-a-vis the climatic change: Impact on the stock management out of water and the agricultural productions</i>	
15:30	Coffee break		
	SESSION 1.4: BIOHYDROLOGICAL PROCESSES AT VARIOUS SCALES Chair: Erik L.H. Cammeraat Room: Audimax	SESSION 2.4: INTERACTIONS BETWEEN BIODIVERSITY AND BIOHYDROLOGY Chair: Paul D. Hallett Room: CIV 060	SESSION 4.3: PROPERTIES OF BIOGEOCHEMICAL INTERFACES Chair: Markus Weitere Room: Bill
16:00	<u>Anda, A.</u> ; Illes, B. <i>Cadmium induced variation in solar energy distribution of maize stand, particularly in relation to evapotranspiration</i>	<u>Yildiztugay, E.</u> ; Ozfidan-Konakci, C.; Kucukoduk, M.; Duran, Y. <i>Osmotic adjustment and water relations of <i>Sphaerophysa kotschyana</i> in response to salinity</i>	<u>Andreeva, D.</u> ; Kondratyeva, L. <i>Activity of sulfate-reducing bacteria in the Amur River sediments</i>
16:15	<u>Hentschel, R.</u> ; Priesack, E. <i>Modeling single tree and stand transpiration in respect of tree architecture and forest canopy structure</i>	<u>Kleimeier, C.</u> ; <u>Lennartz, B.</u> ; Karsten, U. <i>The processes and efficiency of nitrate turn over in degraded peat as investigated under continuous flow conditions</i>	<u>Wallach, R.</u> ; Wang, Q. <i>On using Miller similarity to scale sorptivity by contact angle</i>
16:30	<u>Arnold, S.</u> ; Baumgartl, T. <i>Ecohydrology of the Brigalow Belt: Capturing plant-water interactions at various scales</i>	<u>Nowicki, P.</u> ; Kajzer, J.; Marczyk, J. <i>Metapopulations of endangered <i>Maculinea</i> butterflies are resilient to flood and fire</i>	<u>Hallin, I.L.</u> ; Douglas, P.; Doerr, S.H.; Bryant, R. <i>Physical and chemical effects of biochar on natural and artificial water repellent soils</i>
16:45	<u>Gröngröft, A.</u> ; Landschreiber, L.; Eschenbach, A. <i>Quantifying the influence of soil and land use on the soil water balances and dynamics along the Okavango River Basin – A conceptual approach</i>		<u>Göbel, M.-O.</u> ; Woche, S.K.; Abraham, P.M.; Schaumann, G.E.; Bachmann, J. <i>Water repellency enhances attractive colloid-grain interactions in a water-saturated sand</i>
17:00	<u>Mori, M.</u> ; Nagai, H.; Ogata, T.; Yasutake, D.; Kitano, M. <i>Soil moisture variability in a steep slope near the ridge in the forested mountain range, Shikoku, Japan</i>		<u>Drahorad, S.L.</u> ; Felix-Henningsen, P.; Lichner, L. <i>Changes in physical and chemical soil characteristics and penetration resistance during the process of early-stage succession in dune sand in Sekule, Slovakia</i>
17:15	<u>Lichner, L.</u> ; Capuliak, J.; Zhokova, N.; Holko, L.; Orfánus, T.; Czachor, H.; Kollar, J. <i>Pines influence hydrophysical parameters and water flow in a sandy soil</i>		<u>Badorreck, A.</u> ; Gerke, H.H. <i>Visualization of soil structure modifications and infiltration patterns by ground-dwelling beetle larvae and moss vegetation</i>
17:30 - 19:30	Posters & Wine Chair: Horst H. Gerke - Room: Atrium		

TIME	FRIDAY 24 MAY 2013	
SESSION 2-1: WATER SCARCITY		
Chair: Loes van Schaik - Room: Audimax		
08:30	Keynote Arnon Dag	<i>Transition of world olive cultivation from extensive rain-fed to intensive irrigated: How water quantity and quality influence crop physiology and productivity</i>
09:00	<u>Kostka, S.J.</u> ; Gadd, N.J.	<i>More crop per drop – Maximizing crop yields with up to 40% less water</i>
SESSION 3-1: CROSSING BORDERS		
Chair: Uwe Ehret - Room: Audimax		
09:20	<u>Eisendle, U.</u> ; <u>Hilberg, S.</u>	<i>Biohydrology and Hydrogeology – Crossing a border to bridge a gap</i>
09:40	<u>Ellingson, K.S.</u> ; <u>Pruett, C.E.</u>	<i>Restoration of a coastal estuarine ecosystem: A tool to increase hydrologic storage capacity in response to storm surge and sea level rise</i>
10:00	Coffee break	
SESSION 1-3: LANDSCAPE HYDROLOGY		
Chair: Eckart Priesack - Room: Audimax		
10:30 solicited	<u>Doerr, S.H.</u> ; Bodi, M.; Santin, C.; Balfour, V.; Woods, S.; Cerda, A.; Mataix-Solera, J.; Shakesby, R.	<i>The impact of ash from wildfires on hydrological and biological processes</i>
10:50	<u>Schaaf, W.</u> ; Elmer, M.; Gerwin, W.; Nenov, R.; Fischer, A.; Zaplata, M.	<i>Feedbacks between vegetation, surface structures and hydrology during initial development of the artificial catchment 'Chicken Creek'</i>
11:10	<u>Kaletova, T.</u> ; Rodny, M.; Surda, P.; Novotna, B.	<i>Crop impact on runoff generation in an agricultural landscape</i>
11:30	Lunch	
13:30 - 14:30	Poster prize Chair: Gabriele E. Schaumann - Room: Audimax	
SESSION 2-2: CLIMATE CHANGE, BIODIVERSITY AND FOOD SECURITY		
Chair: Stefan H. Doerr - Room: Audimax		
14:30 solicited	Jehne, W.; <u>Keijzer, M.N.</u>	<i>Restoring microbial drivers of the earth's hydrological dynamics, climate and our future</i>
14:50	Keynote Norbert Kamjunke	<i>Dynamics of dissolved organic carbon in drinking water reservoirs: Hydrological control, ecological processing, and effects on water quality</i>
15:20 – 17:00	Coffee break Concluding remarks, discussion, farewell	